

CLAIMS

1. A manufacturing method for an electronic device that has IC elements having an electrode formed on both faces thereof and a first and second circuit layer,
5 comprising:

a step of electrically connecting the electrode of one side of the IC elements with the first circuit layer, electrically connecting the electrode of the other side of the IC elements with the second circuit layer and electrically connecting the first and second circuit layers; and

10 a step of positionally aligning the connection surfaces of the IC elements and either one of the circuit layers while continuously supplying the IC elements and either one of the circuit layers separately.

2. The manufacturing method for an electronic device according to claim
15 1 wherein the step of continuously supplying the IC elements comprises:

a step of individually holding an IC element in an IC element holding part of an IC elements transport mechanism having not less than one IC elements holding part;
and

20 a step of delivering the IC element thus held by running the transport part of the transport mechanism.

3. The manufacturing method for an electronic device according to claim
2 wherein the IC elements transport mechanism is disc shaped.

4. The manufacturing method for an electronic device according to claim
2 wherein the IC element holding part is formed as a notch shape.

5. The manufacturing method for an electronic device according to claim
5 2 wherein the step of holding an IC element individually in the IC element holding part
of the transport mechanism uses an IC elements alignment/supply mechanism to
facilitate holding of an individual IC element by the IC element holding part.

10 6. The manufacturing method for an electronic device according to claim
5 wherein the IC elements alignment/supply mechanism is a linear feeder.

7. The manufacturing method for an electronic device according to claim
5 wherein the IC elements alignment/supply mechanism is a high frequency alignment
type feeder.

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8. The manufacturing method for an electronic device according to claim
1 wherein the electrical connection of an electrode of the IC elements and at least one of
the first or the second circuit layers is made via an anisotropic conductive adhesive
layer.

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9. The manufacturing method for an electronic device according to claim
1, further comprising:
a step of connecting at once, the electrodes of the IC elements and at least one
layer from among the first or the second circuit layers, wherein the step is after the step

of positionally aligning the connection surfaces.

10. The manufacturing method for an electronic device according to claim
9 wherein the method in that the electrode of the IC elements and at least one layer from
5 among the first or the second circuit layers is connected at once is realized by thermal
compression.

11. The manufacturing method for an electronic device according to claim
10 wherein the gaps between the first and second circuit layers be sealed by the thermal
10 compression.

12. The manufacturing method and electronic device according to claim 9,
further comprising:

a step of cutting a continuum of the plurality of the IC elements into individual
15 pieces, wherein the step is after the step of connecting, at once, a plurality of the IC
elements with at least one from among the first or the second circuit layers.

13. The manufacturing method for an electronic device according to claim
1 wherein a conductive layer is formed on the surface of at least one from among the
20 first or the second circuit layers.

14. The manufacturing method for an electronic device according to claim
1 wherein at least one from among the first or the second circuit layers is provided with
a slit.

15. The manufacturing method for an electronic device according to claim
11 wherein the conductive layer includes aluminum.

5 16. The manufacturing method for an electronic device according to claim
11 wherein at least one from among the first and second metallic films is supported on a
base substrate comprised of an organic resin, and that this organic resin be selected from
among polyvinyl chloride (PVC), acrylonitrile butadiene styrene (ABS), polyethylene
terephthalate (PET), polyethylene terephthalate glycol (PETG), polyethylene
10 naphthalate (PEN), polycarbonate resin (PC), biaxial polyester (O-PET), or polymide
resin.

17. The manufacturing method for an electronic device according to claim
11 wherein either one of the first or the second metallic films is supported on a base
15 substrate comprised of paper.